

Routine regulatory task yields extraordinary results



ODW Regional Engineer Andy Anderson (left) and Kalama Public Works Director Carl McCrary look for *Columbasellus acheron* in the raw water entering the Kalama diatomaceous earth (DE) treatment plant.

The City of Kalama has one of the most recently built diatomaceous earth treatment plants in Washington. However, that is not the city's only claim to fame.

A few years ago, an ordinary regulatory task turned up some very extraordinary results. During the city's source investigation for potential groundwater under the direct influence of surface water, staff discovered a brand new crustacean species.

The path to the discovery began in August 1997 when the Office of Drinking Water (ODW) placed Kalama's Ranney Well on a list of groundwater sources potentially under the direct influence of surface water (GWI).

Kalama water utility staff monitored the water and the river for months. Using their data, ODW established a hydraulic connection between the well and the river, and a need for microscopic particulate analysis of the water.

Tests the following October showed a "high risk" of surface water contamination. ODW advised the city its Ranney Well was indeed GWI, and required the city to begin using filtration treatment.

Kalama's Ranney Well sits on the bank of the Kalama River, about two miles east of the confluence of the Kalama and Columbia rivers. The well was designed to yield 2.6 million gallons per day from the unconfined aquifer.

Built in 1975, the well consists of a caisson sunk about 30 feet deep on the riverbank, and three laterals extending from it. The laterals are about 15 feet below the riverbed, and contain about 300 total lineal feet of screened 10-inch pipe to collect the water.

Unusual results

To prepare for treatment, and to find out if the surface contamination was due to a flaw in construction or wear and tear, the city

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Washington State Department of Health Division of Environmental Health Office of Drinking Water

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Director's Column



BY DENISE ADDOTTA CLIFFORD

Who will you call when chaos reigns?

As I write this, CNN is filled around the clock with horrific images of flooding and devastation caused by

hurricanes Katrina and Rita in the Gulf Coast. These events, long-predicted but still shocking, have shown us what can happen to public water supplies during a natural disaster. More clearly than ever, we see the need for utilities and the public to plan for the unexpected.

Emergencies happen every day to water systems in Washington. We see bacterial contamination, supply interruptions from drought, loss of pressure from power outages, and contamination from flooding. Water systems are also the target of vandals and individuals whose primary motive is to harm people, disrupt business, and spread fear by intentionally contaminating the water supply.

Protecting public health is our top priority. One of the ways we do this is by requiring water systems to write emergency response plans that address many types of emergencies. But just writing the plan is not enough. We all need to do more to protect our systems and the people we serve.

In many ways, water systems are seen as "first responders" – essential players in emergency response. It's no longer okay to simply be a water provider. In an emergency, the public expects more.

Every water system manager needs to look for ways to integrate security measures and emergency response into day-to-day operations by making a strong commitment, dedicating resources, writing a comprehensive response plan that anticipates the potential for disaster, sharing the plan with others, training staff, and regularly testing the plan.

Does your local sheriff know who you are? Does the fire chief? Do you know how to reach each other at three in the morning? It's important for water systems to get to know their response partners, understand their resource limitations, and have current contact information. Having those relationships developed in advance goes a long way to an effective response effort. The middle of a crisis is not the time to try to build trust.

Washington WILL experience a major disaster at some point in time. We must be prepared to maintain safe and reliable sources of drinking water when our world erupts into chaos. Making a strong commitment to preparedness and working together as partners can help minimize the devastating effects of a major disaster and protect the health of our citizens.

Certified operators - Did you get your renewal notice?

The Office of Drinking Water mailed Water Works Operator renewal notices last month. **The deadline for payment is January 21, 2006**.

ODW will mail a second, final notice, with a late fee, on January 25. If you do not pay your renewal fee by February 28, 2006, your certification will be inactivated.

If you did not receive your renewal notice, call (800) 525-2536, ext. 1.

Better late than never

Consumer Confidence Reports Overdue

The July 1 deadline for distributing annual consumer confidence reports (CCRs) to water system customers and the Office of Drinking Water has come and gone.

About 186 systems, serving close to 81,679 people, failed to meet this year's deadline. The U.S. Environmental Protection Agency (EPA) considers these systems federal significant non-compliers.

Last year EPA chose to pursue enforcement with systems that did not submit their required CCR. As a result, five systems received federal administrative orders and were subject to fines.

Don't be one of those systems this year! Get your reports distributed to customers and the Office of Drinking Water as soon as possible. It is better late than never.

For additional information, call one of the numbers listed at right or visit the Web site at http://www.doh.wa.gov/ehp/dw/our_main_pages/consumer.htm

Send a copy of your CCR to the appropriate Regional Office:

Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Kitsap, Lewis, Mason, Pacific, Skamania, Thurston and Wahkiakum counties

Attn: Consumer Confidence Report

Southwest Regional Office Phone: (360) 664-0768 PO Box 47823 Fax: (360) 664-8058

Olympia WA 98504-7823

Island, King, Pierce, San Juan, Skagit, Snohomish and Whatcom counties

Attn: Consumer Confidence Report

Northwest Regional Office Phone: (253) 395-6750 20435 - 72nd Ave S Ste 200 Fax: (253) 395-6760

Kent WA 98032

Adams, Asotin, Benton, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman and Yakima counties

Attn: Consumer Confidence Report

Eastern Regional Office Phone: (509) 456-3115 1500 W 4th Ave Ste 305 Fax: (509) 456-2997

Spokane WA 99204

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paid for a thorough cleaning, pump test, and video assessment of the facilities.

It was during this process, in early 2000, that the city discovered a colony of unidentified creatures on the well casing.

Carl McCrary, Kalama's Public Works Director, contacted ODW's Southwest Regional Office for help identifying and assessing the apparent crustacean. They needed to know if the creatures presented a threat to public health.

It was a real puzzle

Several experts were consulted. Dr. Jeff Cordell, an entomologist from University of Washington's School of Fisheries and Oceanography, called the single specimen a "stonefly" in the aquatic stage of its life cycle.

Dr. John Longino of The Evergreen State College was unsure of its identity, but recognized it as unusual. With the City of Kalama's approval, Longino sent the specimen to researchers at the Natural History Museum of Los Angeles County.

New species, new genus

As it turns out, the Kalama creature is not just a new species, but an entirely new genus. It is a subterranean isopod, living under the riverbed in the Kalama area.

Researchers named the creature "Crustacea: Isopoda: Asellidae: *Columbasellus acheron.*" That is a mouthful for an eyeless un-pigmented creature, less than 15 millimeters in size.

The creature's short name is *Columbasellus acheron*, which appropriately honors the Columbia Basin watershed and the River Acheron that flowed through the underworld of Greek mythology.

Tiny, but influential



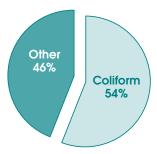
Columbasellus acheron clinched the Kalama City Council's decision to fund a new water treatment plant. The tiny isopods don't threaten public health. However, their appearance proves the interaction between surface and groundwater, and the inherent microbial risks.

Work on the surface water treatment plant is complete, and it is successfully meeting water quality standards. Occasionally

workers see *Columbasellus acheron* in the raw water, but the new treatment plant removes them.

A paper memorializing the Columbia groundwater isopod is in the April 23, 2003 *Proceedings of the Biological Society of Washington*, Vol. 116, No. 1, pp. 190–197. The authors acknowledge assistance from Carl McCrary of Kalama, as well as Rich Hoey and Dr. Jude Van Buren at the state Department of Health.

Problems that generate toll-free, after-hours emergency calls from water systems



Since we initiated the toll-free phone service in 2000, the majority of after-hours calls have been coliform bacteria findings and concern over an immediate health threat to consumers on a public water system. However, it isn't just problems with coliform that signal a water system to call the Office of Drinking Water after normal working hours, or on weekends and holidays.

About four of every 10 calls involve situations or observations not directly tied to bacteria in drinking water. Most of these calls are for concerns with water outages, broken pipes or treatment facilities, or

vandalism of reservoirs and other facilities. Other calls are for more unusual findings.

An example is the report from a small water system in Grant County that described a "long, thin worm" in the drinking water. Aside from the obvious aesthetic concern a consumer might have, such a finding needed some research to determine if a real health threat existed, and what advice the water system should give to consumers.

As it turned out, the "worm" was a horsehair worm, a nematode that is parasitic to some insects, like crickets and grasshoppers. These four to 24-inch worms can be disgusting if found in a glass of water, but they are not harmful to humans or animals. Further investigation revealed that the worm was not actually a drinking-water problem, since it was found in a commode where a person had thrown a deceased cricket.

Had this organism been identified as something like a schistosome, or some type of filarial worm, and had it been found in the drinking water, there would have been a very real health threat. Moreover, an advisory warning consumers not to drink the water would have been issued.

It is important that water system owners and operators recognize the health threat to their customers when certain non-coliform findings come to their attention. The toll-free number is available for direction in dealing with any kind of situation or finding that could lead to concern about the quality of the drinking water.

It is equally important to recognize that the toll-free line is only for after-hours emergencies and not for problems that arise during business hours. Direct contact with a drinking water regional office is the best approach for dealing with problems that occur between 8 a.m. and 5 p.m., Monday through Friday.

More information is online at http://www.doh.wa.gov/ehp/dw/Publications/after.htm

After-Hours Emergency Calls

37 Coliform

Other:

- 10 Water outages
- 5 Broken pipes / repairs
- 4 Vandalism of reservoirs
- 2 Chemical overfeed
- 2 Chlorinator failure
- 2 Color problem1 Horsehair worm
- 1 Well damaged by other well
- construction
 Cross-connection
- 1 Sediment in drinking water
- 1 Pump failure
- 1 Surface water treatment problem



(877) 481-4901

Call this toll free number after-hours if a drinking water emergency:

- Threatens the health of your customers or the integrity of your system.
- Can't wait until the next business day.

Results of School Lead Testing Grants

A wave of publicity about lead last year raised concerns about the quality of drinking water in schools. The state reimbursed Washington's public elementary schools from December 2004 through June 2005 for a portion of the cost of testing for lead in their drinking water.

The Office of the Superintendent of Public Instruction (OSPI) made sure eligible schools knew the funds were available. Information regarding grant availability was sent directly to eligible schools, posted on the OSPI and state Department of Health (DOH) Web sites, and provided in several presentations to school administrators and maintenance personnel.

Schools were not required to test. If they did, however, they had to submit sample results to the Office of Drinking Water (ODW) to qualify for reimbursement.

A total of \$750,000 was originally allocated to cover the anticipated costs of testing for the 2003-04 and 2004-05 school years. Of this amount, just \$117,440 was actually spent.

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Help for water systems when bacterial or chemical issues could affect consumer health



Sometimes a water system finds through testing that its drinking water has bacteria or chemicals in it that are at levels of immediate health concern. We often designate such findings as being "acute."

When an acute level of contaminant is present in drinking water, the system must notify its customers within

24 hours and tell them how to help reduce their risk of exposure. When problems with bacteria occur, the common advice for customers is to boil the water before drinking it.

However, boiling for chemical contaminants may not help because the levels may increase as the water boils off. For chemicals found at acute levels, it is best not to drink the tap water. Consumers should use an alternative, such as bottled water, until the problem is corrected.

Office of Drinking Water (ODW) regional staff should be contacted immediately whenever a high level of chemical contamination is detected. A high level is anything over the regulatory maximum contaminant level (MCL) for that chemical.

Since chemicals have an MCL based on long periods of exposure, usually over a lifetime, they may not pose an immediate threat, and 24-hour notification of consumers may not be needed. (The chemical most likely of immediate concern is nitrate, and special precautions for infants and pregnant women should always be recommended.)

Regional drinking water staff can offer guidance to address many health risk situations that could lead to the issuance of an immediate consumer notice. ODW staff will determine if a chemical found in drinking water is an immediate health risk and outline the advice a water system should give to consumers.

Sometimes the situation will be of interest to the local media and a news release will need to be prepared. ODW can help with wording and issuing news releases.

While no water system wants to see drinking water contaminated with either bacteria or chemicals, such events can happen. When they do, ODW is ready to help water systems address the situation in ways that protect your customers' health.

Information on health advisories is online at http://www.doh.wa.gov/ehp/dw/our_main_pages/dwflood.htm

American Water Works Association

7 Washington subsections offer local training opportunities



Accu-tab chlorine tablet systems vendor Howard Taub (left) demonstrates the operation of a treatment unit in use at the Camas water system to Washougal operator Ed Bush and others at the September 2005 meeting of the Lower Columbia AWWA subsection.

The American Water Works Association (AWWA) is an international nonprofit scientific and educational society dedicated to the improvement of drinking water quality and supply.

AWWA subsections give members the chance to take advantage of local educational programs and network more locally and frequently with their peers.

There are seven subsections operating in Washington. As part of the Pacific Northwest Section of AWWA, each subsection covers a specific area of the state. They emphasize involvement at the local level, and provide periodic training with continuing education units for their members.

AWWA Washington subsections

Blue Mountain*
Central Washington
Inland Empire*
King County
Lower Columbia
Northwest Washington
South Sound

*These subsections include counties in Idaho.

Each subsection has its own officers, selects training topics and invites local operator-instructors, consultants, vendors and state employees in to speak. Some subsections field teams for the conference competitions on pipe tapping, top operators, and gimmicks and gadgets. The subsections also support Water For People.

For more information, visit the Web site at http://www.pnws-awwa.org/subsection.cfm

Funding for water systems

2005 Priority Project List

The Office of Drinking Water (ODW) has applied for 2005 Drinking Water State Revolving Fund (DWSRF) project loan funds from the U.S. Environmental Protection Agency. We anticipate receiving the grant award in late winter or early spring, with contracts executed shortly thereafter.

Because of the volume of applications received, only the highest priority projects will receive funding offers. Lists of eligible and ineligible projects are online at http://www.doh.wa.gov/ehp/dw/our_main_pages/dwsrf.htm

More funding information will be in the February Water Tap, a special edition focusing on the DWSRF.

2006 Application Cycle

2006 program guidelines and application form will be online soon at http://www.doh.wa.gov/ehp/dw/our_main_pages/dwsrf.htm

2005 Water System Acquisition and Rehabilitation Program

In September, nine jurisdictions submitted 10 applications to ODW for Water System Acquisition and Rehabilitation

Program (WSARP) funding. WSARP helps local governments maintain safe, reliable drinking water systems throughout the state.

The applications are listed in the box at the bottom of the page. Totaling more than \$3.5 million, they are competing for \$2 million available to fund this year's projects.

ODW recently scored the proposed projects and drafted the priority project list. At their December meeting, Public Works Board members will select projects for funding. Only the highest scoring eligible projects that are ready to proceed will receive funding offers.

The 2005 Legislature committed the \$2 million to help municipal water systems acquire and rehabilitate troubled public water systems that have water quality problems, or have deteriorated to the point that public health is an issue. It was the second Legislative appropriation. In 2003, \$4 million funded 14 projects.

WSARP information is online at http://www.doh.wa.gov/ehp/dw/wsarp/wsarp.htm

ODW, the Public Works Board and the Department of Community, Trade and Economic Development jointly manage these funding sources.

For more information

Chris Gagnon – Office of Drinking Water (360) 236-3095 or chris.gagnon@doh.wa.gov

Leslie Hafford – Public Works Board (360) 586-4128 or leslie.hafford@pwb.wa.gov

JURISDICTION	PROPOSED WSARP PROJECT
Bullerville Utility District	\$92,052 to replace wells
Skamania County PUD No 1	\$300,000 to acquire Port of Skamania Carson Industrial Site Water System
Chelan County PUD No 1	\$500,000 for the Monitor Water System consolidation
Grays Harbor Water District No 1	\$500,000 for consolidation with failing adjacent water systems
Kitsap Public Utility District	\$453,000 to acquire Frog Pond Water System and fund regional consolidation
Town of Lamont	\$5,400 for a domestic water system consolidation project
Lake Whatcom Water & Sewer District	\$309,462 to acquire Lake Whatcom Residential Treatment Center System
Snohomish County PUD No 1	\$460,600 to integrate Candy Cane Park Water System
Snohomish County PUD No 1	\$500,000 to acquire Kayak Estates Water System
Whitworth Water District No 2	\$446,900 to acquire and rehabilitate North Glen Water Association

Tech Tips – Useful Information for Small Systems

Operators of small water systems are often faced with technical problems regarding the proper design and operation of their water system.

The Office of Drinking Water (ODW) has produced a series of publications called "Tech Tips" to help you manage various design and operation challenges. The following Tech Tips are available now:

- Sanitary Protection of Reservoirs Hatches (331-249). A one-page illustrated guide with tips to help operators of small water systems deal with storage reservoir hatches.
- Sanitary Protection of Reservoirs Vents (331-250). A one-page illustrated guide with tips to help operators of small water systems deal with storage reservoir vents.
- Simple Fixes for Wellhead Openings (331-232). A one-page illustrated guide to fixing common problems small drinking water systems encounter in protecting wellheads from contamination.

problems small drinking water systems encounter in protecting wellheads from contamination.

ODW is developing an illustrated guide with tips to calculate disinfection contact time for chlorination treatment, information on bladder tanks and a fact sheet explaining what to do during loss-of-pressure events.

These and other ODW publications are available online at http://www4.doh.wa.gov/dw/publications/publications. cfm or by calling (800) 521-0323. We'll be developing more Tech Tips to help you. If you have a suggestion for a Tech Tip, please call Ronni Woolrich at (360) 236-3092 or e-mail ronni.woolrich@doh.wa.gov

School Lead Testing - Continued from Page 4

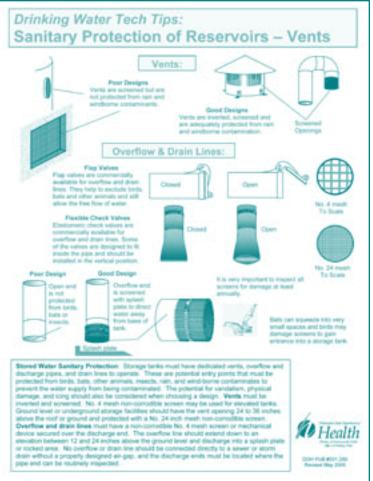
The funding source was a combination of federal funds available from DOH and state funds from the Department of Ecology.

Here are the results of the testing program:

- A total of 7,728 samples were submitted by 455 different schools. OSPI reports that 1,163 public elementary schools met the eligibility criteria for the grant. Therefore, 39.1 percent of eligible schools took advantage of the grant opportunity (455/1,163).
- Of the 455 schools that sampled, 14.1 percent (64/455) were located in Eastern Washington; 85.9 percent (391/455) were in Western Washington.
- OSPI reports that 302 of the eligible schools are located in Eastern Washington and 861 are in Western Washington,

so proportionately more Western Washington schools (45 percent) participated than Eastern Washington schools (21 percent).

- Of the 7,728 samples collected, 559 or 7.2 percent (559/7,728) were at or above 20 parts per billion (ppb) for lead. The U.S. Environmental Protection Agency recommends that action be taken when the lead concentration at a specific outlet within a school is over 20 ppb.
- These 559 samples were collected by 144 individual schools, so 31.6 percent (144/455) of participating schools had at least one sample at or above 20 ppb.
- Of the schools with samples at or above 20 ppb, 9.7 percent (14/144) were in Eastern Washington and 90.3 percent (130/144) were in Western Washington.



Water system capacity and sanitary surveys

People often want to know what water system capacity is. For a water system to have "capacity," it must have adequate capability in three areas: technical, managerial, and financial.

Technical capacity refers to the physical system – source, treatment, storage and distribution - and the ability of personnel to operate the system adequately.

Managerial capacity refers to the ability of the system's managers to conduct necessary activities such as staffing, planning, decision-making, maintaining accountability, and interacting with customers and regulatory agencies.

Financial capacity refers to the ability of the system to generate sufficient revenue, maintain credit-worthiness and manage funds through budgeting, accounting and other methods of fiscal control.

Sanitary surveys support capacity development

The objective of a sanitary survey is to identify deficiencies that affect a water system's capacity to deliver safe and reliable drinking water. The surveyor uses specific findings related to eight elements of a sanitary survey to assess a system's technical, managerial and financial capacity.

Eight elements of a sanitary survey

- 1. Source
- 2. Treatment
- 3. Distribution system
- 4. Finished water storage
- 5. Pumps, pumping facilities and controls
- Monitoring, reporting and data verification
- System management and operations
- Operator certification

The surveyor can presume a system has capacity when the survey shows it is complying with all rules, maintaining the plant in good condition, and has a plan for routinely replacing infrastructure, and its revenues exceed costs.

Red flags

Red flags go up when answers to the questions below reveal areas that could reduce a system's capacity to provide safe, reliable drinking water.

- Does the system have a reliable source of drinking
- Is the source of generally good quality and adequately protected?
- Does the system meter water use at the source?
- Is the condition of the infrastructure, from source of supply to distribution, at the end of its life expectancy?
- Does the operator have sufficient technical knowledge of applicable standards?
- Is the operator properly trained and certified?
- Does the system have an effective operations and maintenance program?
- Are adequate records maintained?
- Is an emergency plan available and workable?
- 10. Do revenues from rates and charges cover system costs? Is money set aside for depreciation and reserves?
- 11. Has the system corrected deficiencies documented in past sanitary surveys?

Additional information is online at http://www.doh. wa.gov/ehp/dw/Programs/sanitary_survey.htm

Penalties encourage compliance with drinking water rules

Each year the Office of Drinking Water (ODW) penalizes a handful of water system owners and operators for failing to comply with drinking water requirements. Since ODW was given the authority to issue civil penalties in 1986, we have issued penalties ranging from \$180 to \$50,000 – with the average penalty being around \$4,700.

ODW can issue civil penalties of up to \$5,000 per day per violation. Our policy calls for penalties as a last resort after trying to work with a system to ensure compliance with drinking water requirements. Water systems are ordinarily offered technical assistance and given many opportunities to come back into compliance before a civil penalty is considered.

The mission of ODW is to protect the health of the people of Washington State by assuring safe and reliable drinking water. Issuing civil penalties has proved to be a valuable tool in accomplishing our mission and bringing systems back into compliance.



Certified Water Works Operators

As water system operations become more complex, certified operators must maintain and upgrade their knowledge and skills in order to protect water quality, water supply and public health. State Department of Health Office of Drinking Water (ODW) regulations require certified water works operators to demonstrate continued professional growth to be eligible for certification renewal.

All operators certified prior to Jan. 1, 2004, including all operators grand-parented into the certification program, must meet the professional growth requirement by Dec. 31, 2006 to be eligible for 2007 certification renewal. Operators certified between Jan. 1, 2004 and Dec. 31, 2006 have until Dec. 31, 2009 to meet the professional growth requirement for the first time.

Operators may choose one of three options for meeting the Water Works Operator Certification Program professional growth renewal requirement:

- Accumulate a minimum of three Continuing Education Units (CEU) or college credits for training that:
 - Is approved by ODW.

- Has an influence on water quality, water supply, or public health protection; and is directly related to the operation or maintenance of a water system, OR is directly related to managing the operation and maintenance of a water system.
 - Examples of acceptable management training include drinking water regulatory compliance, capacity development, rate setting, financial viability, water system security and responding to drinking water emergencies.
- 2. Advance by examination in the Water Works Operator Certification Program to a Level 2, 3 or 4.
- 3. Achieve certification by examination in a different classification as follows:

WDM to WTPO, BTO or CCS WTPO to WDM or CCS BTO to WDM, WTPO, WDS or CCS WDS to WDM, WTPO, BTO or CCS CCS to WDM, WTPO, BTO or WDS

Backflow Assembly Testers

All Backflow Assembly Testers certified prior to Jan. 1, 2004 must pass the professional growth examination by Dec. 31, 2006 to meet their professional growth requirement and be eligible for 2007 certification renewal. Backflow Assembly Testers certified between Jan. 1, 2004 and Dec. 31, 2006 have until Dec. 31, 2009 to pass the professional growth examination for the first time.

ODW contracts with Green River Community College, Washington Environmental Training Center (WETRC), in Auburn to administer the Water Works Operator Professional Growth Program and the Backflow Assembly Tester Certification Program.

Professional Growth Training Opportunities Available

Water works operators in Washington are fortunate that many organizations offer relevant training opportunities and award CEU to help them prepare for certification and meet their professional

growth requirement for certification renewal. Training is available in a variety of formats, price ranges and locations. Workshops, seminars, conferences, college courses, correspondence courses and distance education are all available to meet your training needs.

ODW maintains a training calendar. While the calendar does not list all of the relevant training scheduled throughout the state, it can assist you in contacting one of the major training course sponsors or finding a training session.

Operators choosing to take training via distance education must select a distance education course from ODW's approved list. These are the only distance education courses accepted by the Washington Water Works Operator Certification Program. Operators enrolling in an approved distance education course must follow the Department's Distance Education Approval and Examination Procedure. If you are the certified operator of a system serving a population of 3,300 people or less, you may also be eligible for reimbursement of certain distance education expenses.

A current list of approved distance education courses, procedures, and required forms are available from WETRC. To ensure you receive CEU credit, contact WETRC Certification Services staff for approval and the necessary forms prior to enrolling in any type of distance education.

Resources

View your professional growth transcript and status online at http://www.wetrc.org

If you have questions about your professional growth requirements, call (253) 288-3369 or (800) 562-0858.

The training calendar is published in Water Tap (see page 10) and online at http://www.doh.wa.gov/ehp/dw/our_main_pages/training.htm

Training and Education Calendar: Dec. 2005 - June 2006

<u>Date</u>	<u>Topics</u>	Location	Contact	Phone #	Cost/CEU
Dec 5-8	Backflow Assembly Tester Certification Class	Auburn	WETRC	1-800-562-0858	\$525/3.0
Dec 5-14	BAT Professional Growth Exam Review	Vancouver	WETRC	1-800-562-0858	\$205/1.5
Dec 6	Storage Tank Disinfection & Maintenance	Quincy	ERWOW	1-800-272-5981	\$25/0.5*
Dec 7	Potable Water Service Connections	Moses Lake	ERWOW	1-800-272-5981	\$25/0.4*
Dec 7-8	BAT Refresher Course	Spokane	WETRC	1-800-562-0858	\$205/1.5
Dec 7-8	Emergency Response Planning 2006	Auburn	WETRC	1-800-562-0858	\$155/2.1
Dec 8	Storage Tank Disinfection & Maintenance	Enumclaw	ERWOW	1-800-272-5981	\$25/0.5*
Dec 9	Backflow Assembly Tester Certification Exam	Auburn	WETRC	1-800-562-0858	\$180/NA
Dec 9	BAT Professional Growth Exam	Spokane	WETRC	1-800-562-0858	\$105/NA
Dec 12-13	Advanced BAT Troubleshooting & Repair	Auburn	WETRC	1-800-562-0858	\$205/1.4
Dec 12-15	Backflow Assembly Tester Certification Class	Spokane	WETRC	1-800-562-0858	\$525/3.0
Dec 13	Potable Water Service Connections	Yelm	ERWOW	1-800-272-5981	\$25/0.4*
Dec 14	Storage Tank Disinfection & Maintenance	Port Angeles	ERWOW	1-800-272-5981	\$25/0.5*
Dec 14-16	Water Works Basics	Everett	WETRC	1-800-562-0858	\$275/2.1
Dec 15	Potable Water Service Connections	Kelso	ERWOW	1-800-272-5981	\$25/0.4*
Dec 16	Backflow Assembly Tester Certification Exam	Spokane	WETRC	1-800-562-0858	\$180/NA
Dec 17	BAT Professional Growth Exam	Vancouver	WETRC	1-800-562-0858	\$105/NA
Jan 3-5, 06	Water Distribution Certification Exam Review	Auburn	WETRC	1-800-562-0858	\$275/0.7*
Jan 10-12	Cross Connection Control Basics and Exam Review	Everett	WETRC	1-800-562-0858	\$275/2.1
Jan 17-19	Water Distribution Certification Exam Review	Everett	WETRC	1-800-562-0858	\$275/0.7*
Jan 19	Backflow Incident Investigation & Response	Auburn	WETRC	1-800-562-0858	\$115/0.7
Jan 25-27	Cross Connection Control Basics and Exam Review	Auburn	WETRC	1-800-562-0858	\$275/2.1
Feb 7-8	Adv Cross Conn Control: Risk Assessment & Hazard Analysis	Auburn	WETRC	1-800-562-0858	\$175/1.4
March 7-8	Emergency Response Planning 2006	Everett	WETRC	1-800-562-0858	\$155/2.1
June 6-7	Emergency Response Planning 2006	Moses Lake	WETRC	1-800-562-0858	\$155/2.1

*Operators of Group A small water systems serving 3,300 people or less will be charged a \$25 registration fee through 2005 and \$50 beginning January 1, 2006 for these classes. † These classes are free for Operators of Group A small water systems serving 3,300 people or less.

For information about distance learning activities, call WETRC at (800) 562-0858.

Additional Training Links:

AWWA King County Subsection Web site—http://www.kcawwa.org/

ERWOW Web site—http://www.erwow.org/

WETRC Web site—http://www.wetrc.org/

AWWA Pacific Northwest Section Web site—http://www.pnws-awwa.org/

EPA electronic workshops Web site—http://www.epa.gov/safewater/dwa/electronic.html

For the complete Training Calendar, visit the Drinking Water Homepage and click on Training - http://www. doh.wa.gov/ehp/dw

NOTE: Links to external resources are provided as a public service, and do not imply endorsement by the Washington State Department of Health.

RULE MAKING

Water Use Efficiency rule adoption to occur June 2006

The Office of Drinking Water is delaying adoption of the Water Use Efficiency rule until June 2006. This extension will allow us to address several highly technical issues that those affected by the rule have raised.

After mailing the draft rule language to over 9,000 individuals, we received more than 200 pages of comments.

We are developing a response for each comment.

It is important to do a thorough job and adequately address the numerous comments we have received, prepare an economic analysis and revise the draft rule language to create a rule that is justified and reasonable.

Before we make a decision, several major issues need further discussion. Outstanding questions include:

- Is each of the three new Water Use Efficiency Rule requirements appropriate for the system size?
- Should service meter exemptions be modified and include small systems?
- Is 12 years too long to require installation of service meters?
- Should the rule include language allowing alternate methods of reporting distribution system leakage?

Additional information is online at http://www.doh.wa.gov/ehp/dw/municipal_water/municipal_water_law.htm

New Water Use Efficiency rule timeline

Now through March 2006

Develop economic analysis.

Research alternate rule language proposed during informal comment period.

Prepare final rule language.

April 2006

Mail final draft rule.

Begin formal comment period.

Hold formal public hearings (eastside and westside locations)

June 2006

Adopt rule.



Drew Noble, contract operator, offers comments at the operator certification fee hearing.

Water works operator certification fees

To cover significantly increased costs and a loss of funding, the Office of Drinking Water proposed an increase in Operator Certification Program fees. An informational session and hearing on the proposal occurred October 25, 2005. ODW adopted the new fee schedule November 22, 2005.

The renewal notices mailed last month reflect the new fees.

Upcoming EPA Rules

This month, the U.S. Environmental Protection Agency (EPA) expects to finalize two rules:

Long Term 2 Enhanced Surface Water Treatment Rule

This rule will require surface water systems to take source water samples to quantify their pathogen risk.

Filtered systems with high concentrations of *Cryptosporidium* in their source water will be required to install additional treatment or take other protective measures to reduce the risk of *Cryptosporidium* entering the finished water.

Systems with unfiltered sources will have to install treatment to protect their customers from *Cryptosporidium*.

Stage 2 Disinfectants and Disinfection Byproducts Rule

This rule applies only to water systems distributing disinfected water. To ensure more equitable public health protection, it will change the way maximum contaminant level violations are calculated.

Rather than averaging the results over the entire distribution system, the average results at each sampling point will need to be within the maximum contaminant levels of 80 parts per billion (ppb) for total trihalomethanes and 60 ppb for the five regulated haloacetic acids.

For more information on both rules

Visit the EPA Web site at http://www.epa.gov/safewater/mdbp/mdbp.html

Call the Safe Drinking Water Hotline at (800) 426-4791 E-mail EPA at stage2mdbp@epa.gov

Webcasts are scheduled for these rules on the following dates:

January 17 & 24 – Overview of the LT2ESWTR and Stage 2 D/DBP Rule

January 19 & 26 – Source Water and DBP Data Entry and Management

EPA Webcast information and registration is online at http://www.epa.gov/safewater/dwa/register.html

Cross-Connection Control

The stories on pages 12 and 13 briefly summarize Office of Drinking Water's (ODW) efforts to promote and support water system cross-connection control (CCC) programs. Cross-connection control may not seem to be a significant program to some water systems, but it is important for maintaining the quality of the water they deliver to their customers. This year, the ODW carried out compliance activities for the first time. We have had much success ensuring protection against some of the most serious cross-connection hazards. In the meantime, ODW continues to implement the CCC program to collect data and offer technical assistance to water systems.

2005 Annual Summary Report

Staff at the Office of Drinking Water (ODW) is busy preparing to deploy the Annual Summary Report (ASR) data collection efforts for the 2005 reporting year. ODW uses the ASR to collect information on the status of cross-connection control (CCC) program plans and implementation activities in Washington.

We plan to mail ASR packets to water systems early in 2006. Water systems must complete the forms and submit them to ODW by mid-March.

ODW uses ASR data as the basis for CCC compliance activities. We require the largest community public water systems, those serving 1,000 or more connections, to submit CCC data annually. These systems serve 4.7 million people in Washington.

This year, water system CCC program managers will benefit from corrections and enhancements to the Webbased application that allows them to submit their ASR online. Last year, 88 percent of systems submitted their ASRs online.

ODW will hold ASR training at the following locations:

January 17 Spokane January 18 Tacoma January 24 Yakima January 27 Kelso

Water systems must pre-register if they want to attend. For more information, call Terri Notestine at (360) 236-3133 or e-mail terri.notestine@doh.wa.gov

Cross-connection control compliance results

As reported in September, the Office of Drinking Water (ODW) deployed a Cross-Connection Control (CCC) Compliance Strategy in June. This year's strategy focused our CCC compliance efforts on selected high-hazard premises, and should result in better public health protection for 1.2 million people within Washington.

Using 2004 Annual Summary Report (ASR) results to identify systems out of compliance with CCC rules, ODW sent violation letters to 45 community water systems serving 1,000 or more connections.

Four systems received *reporting* **violation letters** for failing to submit 2004 ASR forms.

All four systems have now complied.

Forty-one systems received *premises isolation* violation letters for failing to comply with mandatory premises isolation requirements for selected high health-hazard premises (nuclear and sewage-related). The letters identified 170 high-hazard premises in need of proper backflow protection.

Thirty-two systems with premises isolation violations have returned to compliance. These systems addressed 137 of the 170 high-hazard premises.

Of the 32 systems that came into compliance:

- 22 submitted corrected ASR forms.
- 14 eliminated water service to high-hazard premises.
- 9 installed backflow preventers for premises isolation.

The numbers total more than 34 because many systems had multiple high-hazard premises to address and chose more than one compliance method.

Four systems submitted action plans with a proposed schedule and plan to eliminate water service or install a backflow preventer.

ODW is working with the five remaining systems to complete their compliance process.

For more information, call Terri Notestine at (360) 236-3133 or e-mail terri.notestine@doh.wa.gov

2006 Approved Assemblies List



The Office of Drinking Water (ODW) will publish the 2006 list of **Backflow Prevention Assemblies Approved for Installation in Washington State** (DOH Pub 331-137) early next year.

ODW bases the list on the University of Southern California (USC) Foundation for Cross-Connection Control and Hydraulic Research's *List of Approved Backflow Prevention Assemblies.*

Per our agreement with USC, we distribute the list only upon request, and limit distribution to the regulated

community, other state agencies and consultants working in the drinking water industry in Washington. We cannot e-mail it, post it on our Web site or distribute it en masse.

Interested parties must submit a request to ODW each calendar year to obtain the complete list at the beginning of the year.

To get a copy of the 2005 list of **Backflow Prevention Assemblies Approved for Installation in Washington State**(DOH Pub 331-137), or place your order for the 2006 list, call
ODW at (800) 521-0323 or visit our Web site at http://www4.
doh.wa.gov/dw/publications/publications.cfm

Office of Drinking Water Introduces New Backflow Incident Form

A new, electronic Backflow Incident Report Form should make it easier and less time consuming for water systems to document the details of backflow incidents.

Users can complete the form on-screen (in MS Word). Incorporating standard data inputs, checkboxes and drop-down boxes, the form is more efficient than traditional narrative-style incident report forms.

Cross-connection control rules require water systems to document the details of backflow incidents on a form acceptable to the Office of Drinking Water (ODW). Further, the systems must submit the forms to ODW with their Annual Summary Report, or upon request.

By standardizing the data as much as possible, the new form makes the information more suitable for data entry, and easier for ODW to analyze.

The Backflow Incident Report form (DOH form #331-243) is online at the:

- Office of Drinking Water http://www4.doh.wa.gov/dw/ publications/publications.cfm
- Western Washington Cross-Connection Professionals Group http://www.backflowgroup.org/
- Spokane Region Cross-Connection Control Chapter http://www.src4.org/

If you have questions or comments about the form, call Simon Tung at (360) 236-3132 or e-mail simon.tung@doh.wa.gov

A list of independent cross-connection control specialists

Cross-connection control (CCC) rules require public water systems to have a certified cross-connection control specialist (CCS) available to develop and implement their CCC programs. Many smaller water systems without such a specialist on staff can comply with the rule by hiring an independent CCS.

A new list will make it easier to find an independent CCS interested in offering services to small public water systems on a contract basis.

The regional CCC groups are developing the list with help from the Office of Drinking Water. The Western Washington Cross-Connection Prevention Professionals Group, which is spearheading the project, soon will send a questionnaire to all certified CCS in Washington to find out if they want to be on the list, the types of services they provide, and their service area.

The list will be online early next year at the:

Western Washington Cross-Connection Prevention Professionals Group http://www.backflowgroup.org/index.html For more information, contact an officer listed at http://www.backflowgroup.org/officers.html

Spokane Regional Cross-Connection Control Chapter http://www.src4.org/

New & Revised Publications

Simple Fixes for Wellhead Openings (331-232). Revised. A one-page illustrated guide to fixing common problems that small drinking water systems encounter in protecting wellheads from contamination.

Preparing for a Sanitary Survey:
Information to Help Small Water
Systems (331-238). Revised. 32-page
booklet helps small drinking water
systems prepare for routine sanitary
surveys. Has basic information and
minimum components of a sanitary
survey, a self-inspection checklist, and
common deficiencies surveyors hope NOT to find.

Water Shortage Response Plans for Small Public Drinking Water Systems (331-316). New! 36-page guidance document that helps water systems prepare a water shortage response plan.

Emergency Drinking Water Sources (331-317). New! 4 pages outlining the requirements for using and maintaining emergency drinking water sources.

Water Rates: Paying for Drinking Water (331-327). New! 2 pages of questions and answers about drinking water rates, rate reviews, rate structures and rate increases.

2004 Annual Report (331-328). New! A 6-page report on Office of Drinking Water (ODW) activities and accomplishments for 2004.

Water System Capacity–Report to the Governor (331-330). New! A 19-page report on our progress implementing the ODW capacity strategy and the continuing challenges we face ensuring water systems have capacity in Washington.

Water System Coordination Act (331-333). New! A 30-page guidance document contains the state rule (WAC 246-293) designed to evaluate and determine critical water supply service areas, and coordinate public water system planning.

ODW publications are online at http://www4.doh. wa.gov/dw/publications/publications.cfm or by calling (800) 521-0323.

Nominations being accepted for 2006 Drinking Water Week awards

In celebration of Drinking Water Week, May 7-13, 2006, the Department of Health's Office of Drinking Water will recognize three water systems and one operator for their commitment to providing safe and reliable drinking water.

2006 is our fourth year to participate in the national Drinking Water Week event. We started off by presenting three awards for system improvements. The second year awards were given to three water systems in the categories of "most improved," "handling a crisis well," and "going above and beyond." Last year we added a fourth category for an award to a water system operator.

In keeping with the notion that change is good, we are modifying our process again this year. For the first time the Office of Drinking Water (ODW) is accepting award nominations from the drinking water community. Nominations will be reviewed by an ODW committee, and final selections will be made by our director's management team. Award winners will be recognized during Drinking Water Week.



If you know of a water system or water works operator deserving recognition, please submit nominations in writing. Complete the form on page 15 of this newsletter and attach it to a one-page summary. The summary needs to include convincing information about why the system or operator you are nominating should be selected for recognition. You may also include additional information such as newspaper clippings and other documents supporting your nomination.

Nominations are due in our office by close of business January 16, 2006. If you have questions, please call Donna Lynch at (360) 236-3167 or e-mail donna.lynch@doh.wa.gov

2006 Drinking Water Week Awards Nomination Form

In celebration of Drinking Water Week, May 7-13, 2006, the Department of Health's Office of Drinking Water will recognize three water systems and one operator for their commitment to providing safe and reliable drinking water.

Please submit nominations in writing. Complete this form and attach it to a one-page summary. The summary needs to include convincing information about why the system or operator you are nominating should be selected for recognition. You may also include additional information such as newspaper clippings and other documents supporting your nomination.

If you are submitting more than one nomination, you can either photocopy this form or download it from the Web site at http://www.doh.wa.gov/ehp/dw/drinking_water_week.htm

bad situation a	nd are now providing excellent service to their customers.
Grace Under Pr	ressure – Recognition for handling a crisis well.
Going Above a community, DC	nd Beyond – Recognition for providing assistance to neighboring water systems, the DH, etc.
	Year/Lifetime Achievement – This award is to recognize an individual water system dication and commitment.
Information abou	t Nominee
Name of System/	ndividual:
City/County:	
Type of System:	Community TNC NTNC
Type of System:	
Type of System: [Number of Service	Community TNC NTNC
Type of System: [Number of Service Form Completed I	Community TNC NTNC
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To our readers:

Water Tap has more than 10,000 readers. Every quarter, readers call to report address changes, request additional copies, tell us they are getting too many copies, or ask to be removed from the mailing list. We want to accommodate your requests, but we need your help. This article has instructions below.

Mailing labels are created from ODW program data and include Group A systems, certified water operators, certified drinking water labs and local health jurisdictions.

To report an address change

We have a separate mailing list for interested parties we can change at will, if notified. Send changes to the address in the box at right. If reporting changes for an operator, water system or lab, you must contact the program in writing.

Operators must send all changes in writing to Water Works Operator Certification program, PO Box 47822, Olympia, Washington 98504-7822.

Water systems and labs must send changes in writing to the appropriate regional office:

Eastern Regional Office, 1500 W 4th Ave., Suite 305, Spokane, Wa. 99204 **Northwest Regional Office**, 20435 72nd Ave. S., Suite 200, Kent, Wa. 98032 **Southwest Regional Office**, PO Box 47823, Olympia, Wa. 98504-7823

To get another copy of Water Tap

To order additional printed copies, call (800) 521-0323. Water Tap is also online at http://www.doh.wa.gov/ehp/dw/our_main_pages/watertap.htm

To eliminate duplicate copies

Check the mailing labels. The computer scrubs the list for duplicates, but it won't catch them unless the name and address on each label are exactly the same.

In This Issue

The following people contributed articles to this issue of Water Tap: John Aden, Peggy Barton, Sara Brallier, Chris Gagnon, Jim Hudson, Judy Jones, Jennifer Kropack, Denise Lahmann, Donna Lynch, Terri Notestine, Sam Perry, Theresa Phillips, Paula Smith, Amy Swecker, Leslie Thorpe, Simon Tung, Linda Waring, Ronni Woolrich.

The Department of Health Office of Drinking Water publishes Water Tap quarterly to provide information to water system owners, water works operators and others interested in drinking water.

Mary Selecky, Secretary of Health

Janice Adair, Assistant Secretary of Health, Environmental Health Division

Denise A. Clifford, Director Office of Drinking Water

Comments, questions, story ideas, articles and photographs submitted for publication are welcome. Please address correspondence to Linda Waring, Water Tap, Office of Drinking Water, P.O. Box 47828, Olympia, WA 98504-7828, or e-mail linda.waring@doh.wa.gov. Past issues are available by contacting the editor or visiting the Web site at http://www.doh.wa.gov/ehp/dw/our_main_pages/watertap.htm

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